

Alec Nielsen

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EDUCATION

- Sep 2004 – Dec 2009 University of Washington
BS in Electrical Engineering
3.86 cumulative GPA
Capstone: "Design of a Low-Cost, Head-Mounted Automatic Guitar Tuner." Advisor: Howard Chizeck
- Sep 2004 – Dec 2009 University of Washington
BS in Bioengineering
3.63 cumulative GPA
Capstone: "Ribosomal Binding Site Measurements and Translation Rate Standardization." Advisor: Herbert Sauro

HONORS & AWARDS

- Sep 2008 – Present Dean's List recipient for 11 quarters
- Sep 2008 – Jun 2009 Mary Gates Research Scholarship
- Nov 2008 Mary Gates Travel Scholarship
- Jun 2008 – Oct 2008 International Genetically Engineered Machine Scholarship

RESEARCH EXPERIENCE

- Mar 2009 – Present Student Researcher in Jennifer Nemhauser's and Eric Klavins' Auxin Synthetic Biology Group.
- Jun 2009 – Aug 2009 Intern at the Institute for Systems Biology in Nitin Baliga's Halobacterium Group.
- Mar 2008 – Aug 2009 Student Researcher in Herbert Sauro's lab in the Bioengineering Department at the University of Washington.
- Jan 2008 – Nov 2008 Team member in 2008 International Genetically Engineered Machine Competition team; received runner-up for Best Presentation.

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PUBLICATIONS & PRESENTATIONS

- Aug 2009 Poster Presentation: "Engineering a Multiplexing Chemostat for Cell Studies." Institute for Systems Biology Symposium.
- May 2009 Publication: Galdzicki, M., Chandran, D., Nielsen, A., Morrison, J., Cowell, M., Grünberg, R., Sleight, S. & Sauro, H. "Provisional BioBrick Language (PoBoL)." BBF RFC 31. BioBrick Foundation. doi: 1721.1/45537.
- May 2009 Oral Presentation: Nielsen, A., Galdzicki, M. & Chandran, D. "Bridging Synthetic Biology Design and Experiments with PoBoL." International Workshop on Bio-Design Automation, San Francisco, CA.
- May 2009 Poster Presentation: "PoBoL in the Lab." International Workshop on Bio-Design Automation, San Francisco, CA.
- May 2009 Poster Presentation: "Ribosomal Binding Site Measurements and Translation Rate Standardization." Undergraduate Research Symposium. University of Washington.
- Nov 2008 Oral Presentation: "The Vector-Jector: Controlled Trans-Kingdom Genetic Transfer from E. coli to S. cerevisiae." International Genetically Engineered Machine Competition 2008, MIT.
- Oct 2008 Poster Presentation: "Ribosomal Binding Site Measurements and Translation Rate Standardization." Synthetic Biology 4.0, Hong Kong.

RELATED PROFESSIONAL EXPERIENCE

- May 2009 – Present Developer for the Synthetic Biology Open Language (SBOL, previously named PoBoL).
- Jul 2009 – Present Member and co-founder of the Synthetic Biology Data Exchange group.
- Jan 2008 – Oct 2009 Undergraduate advisor for the UW's 2009 International Genetically Engineered Machine Competition team.
- Feb 2009 Planner and coordinator for the 2009 Bioengineering Research Fair.
- Sep 2008 – Jun 2009 Academic Chair for University of Washington Chapter of the Biomedical Engineering Society.
- Jul 2009 Attended the First Annual International Workshop on Bio-Design Automation (IWBDA) to give a presentation for "Bridging Synthetic Biology Design and Experiments with PoBoL."

Alec Nielsen

Jan 2007 – Jan 2008 Scholarship Chair for Tau Kappa Epsilon fraternity.

Oct 2008 Attended the Fourth Annual Synthetic Biology Conference (SB4.0) to present a poster for “Ribosomal Binding Site Measurements and Translation Rate Standardization.”

MEMBERSHIPS OF PROFESSIONAL ORGANIZATIONS

Feb 2009 – Present Institute of Electrical and Electronics Engineers (IEEE)

Sep 2007 – Present Biomedical Engineering Society (BMES)

REFERENCES

Herbert Sauro
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